DECEMBER

at the

CALIFORNIA ACADEMY OF SCIENCES

DECEMBER MEETINGS

DATES & TIMES:	Matinee, 2:30 p.m., Wednesday December 13
	Evenings, 8:00 p.m., Wednesday and Thursday, December 13-14
SPEAKER:	Edward F. Noack
PLACE:	May Treat Morrison Auditorium
SUBJECT:	"BHUTAN, LAND OF THE LAMA"

During the past fifteen years, Mr. Noack and his wife, both indefatigable travelers, have journeyed to places that few of us have ever heard of — Gilgit, Hunza, Karakoram, Sudan Equitoria, Dhaulagari, Solu Khumbu, the Wakhan corridor — to mention but some.

The Noack's most recent adventure, and an exciting one it is, occurred earlier this year and came about through the good fortune of meeting Her Highness, Princess Ashi Cheoki, sister of the King of Bhutan. Bhutan lies in the Himalayas on the northeastern border of India. The Princess invited them for an extended stay in her country which gave them the opportunity of visiting not only the important centers and the countryside but also many of the ancient Dzongs and Lamaseries. The formidable mountain barriers and an age-old policy of closed doors to foreigners have helped to preserve Bhutan's culture as well as its mystical way of life. The Noacks were fascinated by this land of spirits, superstitions and apparitions. Fortunately they were allowed to photograph the natives and their particular ethos. The photographing was made possible by the King, His Majesty, Jigmi Dorji Wangchuck. He has since died and has been succeeded by his teenage son, Jigme Singhi Wangchuck.

Mr. Noack has an article in the current issue of *Pacific Discovery*.

Three presentations as indicated and your membership card is your admission. For the matinee performance present it to the door attendant at the entrance to Cowell Hall. You will be asked to present it once again at the auditorium entrance.

One way of ingress only for the evening meetings: through the main entrance of Cowell Hall. The rear planetarium door is no longer being kept open for the monthly meetings.

MORRISON PLANETARIUM

"THE CHRISTMAS STAR", the annual holiday sky show in the Theatre of the Stars, reappears for the twentieth time, and enthusiasm for it, as indicated by attendance, has only increased. It is a fascinating look at the phenomenon which changed the history of the world. Plays from December 4 through January 3.

Performances daily at two with evening shows, Wednesday through Sunday, at eight. Extra performances Saturdays, Sundays, holidays and during Christmas-New Year week at 3:30. Closed Monday and Tuesday nights, Christmas Eve, Christmas Day and New Year's Eve. Admission: Adults, eighteen and over, $1.00. Seventeen and under, 50c.

SPECIAL EXHIBITS

"STARS OVER SAN FRANCISCO", an arresting review of the manner in which Morrison Planetarium evolved, occupies the Hohfeld Gallery adjacent the Hall of Space Science. Projectors, blue prints, miscellaneous photographs, etc., rehearse the story of the making of the great star projector right on our own premises with an introduction to the talented people who made it possible . . . a celebration of the planetarium's 20th Birthday.

"MAN AND NATURE (As Interpreted by the Indians of North America)," continues in Lovell White Hall.

"ONLY A LITTLE PLANET", color photographs by Martin Schweitzer, Lower Gallery, Cowell Hall, originally published in a book of the same title by Friends of the Earth. Continues through the month of January.

"GALAPAGOS" continues in Cowell Hall.

NEWS and NOTES . . . . . .

ON THE EVENING of November 6, Morrison Planetarium, as stated earlier, celebrated its twentieth natal day with birthday cake and champagne at a warm reception hosted by the staff of the Theatre of the Stars. Among the celebrants were several individuals who directly or indirectly had much to do wtih the fact that our planetarium came into being and is still going strong after two decades devoted to education and entertainment.

Seated (left to right), Mrs. G Dallas Hanna whose late husband supervised the entire project; Mrs. Edward Hohfeld whose husband, through his professional association with Alexander F. Morrison coupled with an avowed determination that San Francisco should have a planetarium, made much of the funding possible; Mrs. Frances M. Greeby whose trained eye and steady hand translated carborundum dust into stars on the planetarium dome; and Mrs. Albert S. Getten, wife of the chief designer of the intricate mechanism. Standing (left to right), Mr. Raymond Greeby who did much of the precision machine work on the star projector; Captain Robert D. Risser, Supervisor of the Planetarium; and Dr. Robert C. Miller who was Director of the Academy at the time of the project's inception through its completion and who was a prime mover throughout the development.

Not pictured but present at the party was Mr. Leon E. Salanave who had the difficult task of doing the mathematical computations involved in putting every visible star in the sky in its proper place.

In the twenty years of the planetarium's existence some 20,000 performances have been enjoyed by three and one-half million persons. That's only for starters! Wait'll one of these days when we tell you what we have in mind.

A SPRING DOCENT TRAINING PROGRAM will begin on Wednesday, January 10. The purpose of the program is to provide well-trained volunteer guides for various exhibit and display areas throughout the Academy.

For the training course, there will be ten sessions of three hours each on Wednesday mornings and the size of the class is limited to 40 persons.

Academy membership is required and applicants are now being interviewed by the Docent Council. There is a fee of $20 for the course. Call the Docent

Please enroll

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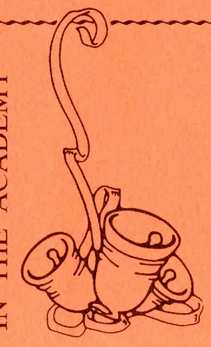

We will notify the recipients of your thoughtfulness before the holidays.

Membership Gift Form

Office, 221-5100, between the hours of nine and one, Monday through Friday, for further information.

THE FOURTH ANNUAL FUNGUS FAIR — for one day only — is scheduled for Sunday, December 10, ten in the morning until five in the afternoon, Simson African Hall. This unusual event, increasing in popularity every year, is sponsored by the Mycological Society of San Francisco which urges everyone to "Discover Mushrooms! A World of Wonders At Your Feet!" Experts will be on hand throughout the day to answer questions and identify specimens.

THE WINTER COURSES in astronomy are scheduled to begin on January 23 (full details in the next NEWSLETTER). Two are being offered: *Celestial Navigation* and *Astronomy for Fun (and Family).*

Meet The Staff . . .

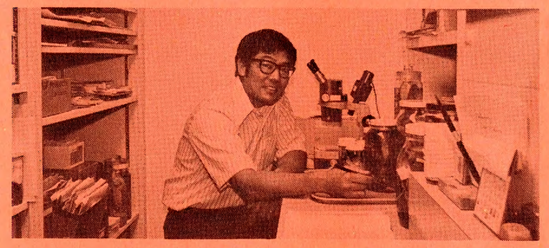

Photo by Lloyd Ullberg

TOMIO IWAMOTO, Assistant Curator in the Department of Ichthyology, was first associated with the Academy in the summer of 1967 when, under the terms of a National Science Foundation grant, he was employed to assist in the incorporating of the Stanford collection with that of the CAS. He came back the following summer to do more of the same and returned most recently in June of this year to assume his present position.

Born and educated in the Los Angeles area, Tomio received his B.A. in zoology from UCLA in 1961. After a semester of graduate school, he went for six months as an army reservist to Fort Ord. Following this he was employed by the U.S. Fish & Wildlife Service at Pascagoula, Mississippi as a fisheries biologist and later, in 1964, transferred to a field station on St. Simon's Island, Georgia. This last position afforded him much time at sea on oceanographic vessels that took him all around the Caribbean and along the coasts of South America.

He returned to his education in 1965 at the Institute of Marine Science at the University of Miami, Florida, and received his Master's degree in Marine Science with a specialty in Ichthyology in 1968. This past June he turned in his Doctoral thesis at the same institution.

A temporary position in 1971 with the Department Fisheries & Wildlife at Oregon State University and the teaching of ichthyology there preceded his recent return to the Academy

Tomio was married a year ago November to his social worker wife, Kinu. They had met during the first summer employment at the CAS. The Iwamotos are strong for camping, back-packing and fishing. Tomio enjoys photography and is a noontime jogger, covering two to five miles a day, clement weather or not.

NEW MEMBERS OF THE ACADEMY

REGULAR MEMBERS

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Mrs. James Treadwell
Mr. Howard T. Weisman
Mr. & Mrs. Charles L. Willard

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Mr. Robert Lauter
Mrs. Meigs Matheson
Mr. Joseph G. Meyer

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Mr. Kurt E. Appert

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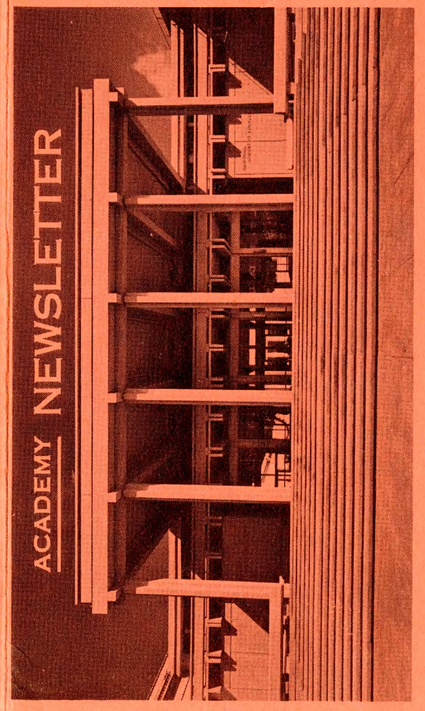

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